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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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EXAMINER

NGUYEN, SIMON

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2685

DATE MAILED: 04/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/501,570

Applicant(s)

WIKMAN, ANDERS

Examiner

SIMON D NGUYEN

Art Unit

2683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 12-14, 17, 18 and 21-23 is/are rejected.
- 7) ☒ Claim(s) 10, 11, 15, 16, 19 and 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-6, 8-9, 12-14, 17-18, 21-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Petch et al. (6,243,372).

Regarding claim 1, Petch discloses a radio communication system including base station (12 of fig.1) communicating over a radio interface with a mobile station (14 of figs. 1), comprising: determining a timing adjustment for the base station (column 8 line 34-37) and a timing adjustment for the mobile station (column 14 lines 4-8); effecting a change in a reference timing of the base station during a first time interval using the first reference timing adjustment, the base station reference timing being used by the base station to determine a time when a block of information starts or ends

Art Unit: 2683

(column 3 lines 1-22, column 8 lines 10-58, fig.7);and effecting a change in a reference timing of the mobile station during a second time interval different from the first time interval using the second reference timing adjustment, the mobile station reference timing being used by the mobile station to determine a time when the block of information starts or ends (column 3 line 35 to column 4 line 10, column 10 lines 23-67, fig.7).

Regarding claims 2-3, Petch further discloses the steps of determining a difference between the base station and a radio network controller (16 of fig.2) timing, comparing the difference with a threshold and if the difference exceeds the threshold, determining the first reference timing adjustment (fig.2, column 7, column 8 line 1-45, column 9 line 7-38, column 14 lines 60-63).

Regarding claims 4-6, Petch further discloses the timing adjustment between a base station and a mobile station in which frame numbers of the base station and mobile frame number values are continuously incremented (column 8 lines 34-45, column 12 lines 40-59). It is noted that Petch's timing adjustment for the base station and mobile station use the frame numbers (column 3 lines 60-67) wherein the frame inherently includes odd and even numbers.

Regarding claim 8, Petch discloses a base station coupled to a radio network controller for communicating with a mobile station over a radio interface (figs. 1-2), comprising: a base station reference timer (40 of fig.2) for generating a reference timing used by the base station to determine a time when a block of information starts or ends (column 7 lines 61-65); and data processing circuitry (44 of fig.2) configured to receive a

Art Unit: 2683

timing adjustment from the radio network controller (16 of fig.2, column 6 line 67 to column 7 line 2) and to adjust the base station reference timer during a first time period allocated for the base station to make a reference timing adjustment (column 8 lines 11-45) different from a second time period allocated for the mobile station to make a reference timing adjustment (column 10 lines 43-67, fig.7).

Regarding claim 9, Petch further discloses the base station reference timer is a frame number counter and the data processing circuitry is configured to adjust the frame number counter (column 8 lines 10-28).

Regarding claim 12, Petch discloses that the BS master clock circuit (40 fig.2) is an internal timing source.

Regarding claim 13, Petch discloses a mobile station for communicating with a base station over a radio interface, wherein the base station being coupled to a base station controller (figs. 1, 2, 5), comprising: a mobile station reference timer (174 of fig.5) for generating a reference timing (176 of fig.5) used by the mobile station (column 10 lines 43-45); data processing circuitry configured to detect a timing signal from the base station and to adjust timing signal during a first time period for the mobile station to make a timing adjustment different from a second time period for the base station to make a timing adjustment (column 10 lines 43-67, column 11 lines 1-25, 45-67, fig.7).

Regarding claim 14, Petch further discloses the mobile station reference timer is a frame number counter and the data processing circuitry is configured to adjust the frame number counter (column 10 lines 56-67, column 11 lines 45-67).

Art Unit: 2683

Regarding claim 17, Petch discloses that the timer (174 of fig.5) is in the mobile station.

Regarding claims 18, Petch discloses a network control node coupled to the base station and the mobile stations for synchronizing timers in each of the base station and the mobile stations wherein the mobile station timer is adjusted at a different time than the base station timer (fig.7, column 3, column 4 lines 1-32).

Regarding claims 21-23, the block of information is a frame (column 3 lines 40-45, 53-57).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Petch et al. (6,243,372) in view of Hall et al. (6,208,871).

Regarding claim 7, Petch discloses a handoff method for a mobile station between the base stations via the controller (column 2 lines 1-9). However, Petch does not specifically disclose the step of timing adjustment for the handoff in a second base station.

Art Unit: 2683

Hall discloses a handoff of the mobile station between a first and second base stations (fig.2), comprising: determining a timing adjustment for the first and second base stations (column 3 lines 28-40); effecting a change in timing of the first and second base stations (column 5 line 25 to column 6 line 59); effecting a change in timing of the mobile station during a time interval different from the timing of the first or the second base station timing is changed (column 5 lines 58-66, column 9 lines 45-53). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have Petch, modified by Hall to synchronize a mobile station with two base stations prior to handoff the mobile station to a second base station in order to prevent the disruption of traffic information.

Response to Arguments

5. Applicant's arguments with respect to claims 1-9, 12-14, 17-18 have been considered but are moot in view of the new ground(s) of rejection.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Simon Nguyen whose telephone number is (703) 308-1116. The examiner can normally be reached on Monday-Friday from 7:00 AM to 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached on (703) 305-4385.

Art Unit: 2683

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 306-0377.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

(703) 872-9314, (for formal communications intended for entry)

Hand-delivered response should be brought to Crystal Park II,
2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Simon Nguyen

April 8, 2003

A handwritten signature in black ink that reads "Simon Nguyen". The signature is written in a cursive style with a large, stylized "S" and "N".